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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/722,844 | 11/26/2003 | Sonia Da Silva | 14XZ130599 (GEM-0105) | 6558 |
| 23413 | 7590 | 02/21/2008 | EXAMINER | |
| CANTOR COLBURN, LLP | | | LESPERANCE, JEAN E | |
| 20 Church Street | | | ART UNIT | |
| 22nd Floor | | | PAPER NUMBER | |
| Hartford, CT 06103 | | | 2629 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/722,844

Applicant(s)

SILVA ET AL.

Examiner

Jean E. Lesperance

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/6/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The Amendment filed January 28, 2008 is entered and claims 1-18 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,191,784 ("Buxton et al.").

Regarding claim 1, Buxton et al. teach the six degree of freedom pointing device controls both transport and view modes within a time-based media editing system and allows a user to toggle between modes without losing visual contact with graphical objects appearing on a video screen. During playback operations in the transport (temporal) mode, the system allows a cap on the six degree of freedom pointing device to be divided into multiple uneven regions in one direction along a single degree of freedom (column 2, lines 14-25), signals from 6DF pointing device 106 are generally used to rotate, translate and scale objects in 3D space. Concerning translation and rotation, the manipulation of a graphical object within a frame largely corresponds to the manipulation of cap 204 by the user. The correspondence of movement of cap 204 to movement of a graphical object is mandated by the human-factors principle of stimulus-response compatibility. The principle of system-response compatibility states that system responses to user actions must be in the same direction or same orientation,

and that the magnitude of the responses should be proportional to the actions. Applied to generalized pointing devices, this framework requires that the movement of a pointing device within the user's physical domain must correspond to the movement of a graphical object or pointer within the virtual physical space displayed on the screen (column 3, lines 29-44) and button panel 204 on 6DF pointing device 106 allows a user to instantly switch between transport and view modes. Transport mode represents the use of 6DF pointing device 106 for temporal control. View mode represents the use of 6DF pointing device 106 for translational-rotational control (i.e., conventional use) (column 4, lines 7-13). The prior art does not specifically teach a first and a second operating modes to modify the image by imparting thereto only movements of rotation in space and of translation or zoom effect. However, the prior art teaches signals from 6DF pointing device 106 are generally used to rotate, translate and scale objects in 3D space. Concerning translation and rotation, the manipulation of a graphical object within a frame largely corresponds to the manipulation of cap 204 by the user. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify signals from 6DF pointing device 106 are generally used to rotate, translate and scale objects in 3D space. Concerning translation and rotation, the manipulation of a graphical object within a frame largely corresponds to the manipulation of cap 204 by the user to obtain a first and a second operating modes to modify the image by imparting thereto only movements of rotation in space and of translation or zoom effect because this would providing a system and method that maps temporal control (or transport) features into a six degree of freedom pointing device that

is also used for the translational-rotational control (or view) of graphical objects (column 2, lines 14-18).

Regarding claims 3 and 4, Buxton et al. teach the signals from 6DF pointing device 106 are generally used to rotate, translate and scale objects in 3D space. Concerning translation and rotation, the manipulation of a graphical object within a frame largely corresponds to the manipulation of cap 204 by the user. The correspondence of movement of cap 204 to movement of a graphical object is mandated by the human-factors principle of stimulus-response compatibility. The principle of system-response compatibility states that system responses to user actions must be in the same direction or same orientation, and that the magnitude of the responses should be proportional to the actions. Applied to generalized pointing devices, this framework requires that the movement of a pointing device within the user's physical domain must correspond to the movement of a graphical object or pointer within the virtual physical space displayed on the screen (column 3, lines 29-44)

Regarding claims 5 and 6, Buxton et al. teach a user can immediately go to the first or last frame of the sequence by moving cap 202 linearly in either the positive or negative X direction (right and left respectively) (column 4, lines 29-32).

Regarding claims 7 and 8, Buxton et al. teach the playback feature permitted by the temporal control mapping allows for expanded video playback functionality as compared to conventional systems. Specifically, rocking the cap back and forth in the left and right directions, enables one to "rock and roll" back and forth smoothly over a particular segment of frame data without having to explicitly issue a stop playback

command when changing directions (column 6, lines 12-19) wherein the zero component represents zero degree of rotation.

Regarding claims 9 and 10, Buxton et al. teach the system utilizes a combination of the pure gain and pure temporal methods. In this system, the cap is divided into three uneven regions that translate to the 0-4 degrees of rotation in the positive or negative B direction (column 5, lines 29-33) wherein three uneven regions is replaced by 0-4 degrees of rotation.

Regarding claims 11 and 12, Buxton et al. teach the system utilizes a combination of the pure gain and pure temporal methods. In this system, the cap is divided into three uneven regions that translate to the 0-4 degrees of rotation in the positive or negative B direction (column 5, lines 29-33) wherein 0-4 degrees of rotation is considered less than half of a normal rotation.

3. Claims 2 and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,191,784 ("Buxton et al.") in view of USPN 7,002, 553 ("Shkolnikov"..

Regarding claim 2, Buxton et al. teach all the claimed limitations with the exception of providing filtering the command information for the rotation. However, Shkolnikov teaches The filter code is configured to separate an intentional user motion input from accidental motion. Filter code may have external forces filter code to separate user input from undesired effects of external forces, step motion code to translate user intentions into precise movement of a pointer over the grid, and to allow readjustment of the system between steps, sliding zero code to allow the user to

change his/her position while operating the device, adaptive threshold code to optimize operator interaction with the system via feedback, and/or calibration code to effect user and application preferences (column 4, lines 44-54). Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the filter code as taught by Shkolnikov in the system disclosed by Buxton et al. because this would providing a partial or full duplication of the input means on the system or by allowing the user to rotate, reattach, slide, or move system parts.

Regarding claims 13 and 14, Buxton et al. teach the system utilizes a combination of the pure gain and pure temporal methods. In this system, the cap is divided into three uneven regions that translate to the 0-4 degrees of rotation in the positive or negative B direction (column 5, lines 29-33) wherein 0-4 degrees of rotation is considered less than half of a normal rotation.

Regarding claims 13-18, Buxton et al. teach the system utilizes a combination of the pure gain and pure temporal methods. In this system, the cap is divided into three uneven regions that translate to the 0-4 degrees of rotation in the positive or negative B direction (column 5, lines 29-33) wherein three uneven regions is replaced by 0-4 degrees of rotation.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the ably examiner should be directed to Jean Lesperance whose telephone number is (571) 272-7692. The examiner can normally be reached on from Monday to Friday between 10:00AM and 6:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shalwala Bipin, can be reached on (571) 272-7681.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571) 273-8300 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA, Sixth Floor (Receptionist).


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Jean Lesperance



Art Unit 2629

Date 2/16/2008



BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600